

Testimony of the American Public Health Association

**Concerning the Need For Investment in
Public Health Preparedness to Combat Terrorism**

Mohammad N. Akhter, MD, MPH

**Presented to the Committee on
Health, Education, Labor, and Pensions
United States Senate**

October 9, 2001 at 10:00 a.m.

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Mr. Chairman and members of the Committee, my name is Mohammad Akhter, and I am the Executive Director of the American Public Health Association. APHA is the oldest and largest public health association in the world, representing approximately 50,000 public health professionals in the United States and abroad. I am honored to appear before you to discuss the role of our public health infrastructure in preparing for, preventing, detecting, and responding to a bioterrorist event.

On behalf of our colleagues and members, I salute you, Mr. Chairman, and the members of the Committee for your timely recognition of the importance of public health in addressing the threats currently facing our great nation. My role today will be to assess how the public health infrastructure can and must be enhanced to respond to a bioterrorism emergency with greater speed, efficiency, and effectiveness.

Preventing a Bioterrorist Event is Preferable to Responding to One

On September 11th, the Centers for Disease Control and Prevention issued precautionary instructions to health departments to be on special alert for possible clusters of unusual disease symptoms, and hospitals were notified by state and local health officials to report any such incidents promptly. This was an appropriate action in the face of an obvious disaster. But, a bioterrorist attack itself won't be obvious. Links must be established between the intelligence community and public health officials on a routine basis to discern the actual attack, eliminate the response lag-time of the agent's incubation period, and thereby prevent casualties. Public health must be included in the intelligence process, and given appropriate clearance to review suspicious occurrences and threats much earlier in the process. There must also be a new segment of the intelligence community that is devoted to detecting bioterrorist threats. Good intelligence is key to preventing attacks.

Communication and Coordination

We have heard over the last several weeks that we must enhance our ability to gather information in an emergency, and to communicate it efficiently to all relevant parties. This means establishing linkages among emergency managers, local health departments, clinics, and hospitals so that critical data in an emergency situation can travel seamlessly to identify, contain, and respond to an emergency in the most efficient way possible. This is mandatory, not optional, and yet the reality is that approximately ten percent of the health departments in the United States do not even have e-mail.

We must remember, however, that merely providing funding to bolster technical support is not enough. We also have to change the way we do business to meet the level of the threats now facing us. If a bioterrorist attack occurred on a Friday afternoon, there would be no report of it until Monday morning under the current staffing profile of most health departments. The events of September 11th demand that we now provide access to the public health network twenty-four hours a day.

Training and Expansion of the Public Health Workforce and Infrastructure

Members of the Committee, you have heard before about the gaps in our most basic public health capacities. Indeed, this Committee, under the leadership of Senators Frist and Kennedy, led the charge last year with the Public Health Threats and Emergencies Act, and the public health community is both grateful, and ready to advance the objectives of that legislation. Recognizing that you are already familiar with gaps in staffing, training, laboratory and information capacity and coordination, I will focus on only a few specific points.

CDC must expand its capacity to respond to more than one event. As the world's premiere agency for public health response, CDC must re-consider its own surge capacity, when state and local health departments rely on the agency so heavily. As such, CDC should integrate into the Health and Human Services regional system, establishing a new layer of workforce and supporting capacity regionally. This will allow continued federal technical support in all regions if the national transportation system is affected, while also recognizing that metropolitan areas and bioterrorist attack zones themselves may cut across state boundaries.

It is essential that every state have essential epidemiology personnel in place. CDC's Epidemic Intelligence Service Officers, the "Disease Detectives," can provide a set of very skilled hands to address a host of unanticipated events. Only 25 states have EIS officers at this time. Also, only 32 states employ a designated public health veterinarian. This is another lapse we can't afford. Seventeen of the 20 designated bioterrorism agents are either zoonotic, meaning they are transmitted from animals to man, such as plague; or they are fairly common diseases of animals, such as anthrax; or, they are foodborne illnesses such as Salmonella, about which public health veterinarians receive extensive training. These and other core communicable disease experts must be based in every state.

Training of the Medical Workforce and Enhancing Institutional Capacity

Even if we succeed in enhancing our communication and intelligence capabilities, this will not suffice unless the workforce of first-responders is adequately trained to detect and respond to bioterrorist threats. Last week in Florida, the first reported case of inhalational anthrax in the U.S. since 1976 was quickly identified, and appropriate therapy initiated. We are encouraged by this, but know that this might not be the norm. We cannot underestimate the importance of our front line health professionals; enhancing

their technical expertise and knowledge of a broader array of health threats is of paramount importance at this time.

The capacity of our hospitals to accommodate a large number of patients is also under scrutiny. Emergency rooms can barely address current needs. In the event of a terrorist attack, there would be a surge in need for trained personnel who can diagnose and treat rare diseases, and also for isolation areas and rapid mobilization of special drugs and vaccines. The economic efficiencies of the “just in time” drug inventory system clearly operate to the disadvantage of a population confronted with an epidemic. Despite the negative impact on the bottom line, we must maintain a sufficient inventory of essential vaccines and drugs, and develop more surge capacities on a daily basis if we are to approach an adequate level of preparedness for a bioterrorist event.

The Safety of our Food Supply

So far, our only known domestic bioterrorist event occurred in 1976, when members of a religious cult contaminated a salad bar with Salmonella, sickening more than 700 people. Our food supply remains vulnerable. The number of inspectors employed to safeguard our food supply is vastly insufficient, especially the workforce of the Food and Drug Administration. So much of our food is imported from countries that utilize few precautions in the production of their products, yet we lack the authority and the personnel to scrutinize these products properly. Jurisdiction over food safety is currently spread among a host of agencies. APHA has long advocated for a single agency to address food safety, and current events have validated the wisdom of this position. We are grateful that many members of this Committee have, over the years, engaged the problems of understaffing, imported food safety, and the regulatory structure.

Conclusion

We have focused on recognition of unique illnesses that may signal an attack, and were an attack to occur, we hope we will all be ready. But I must caution that the agents themselves pose such a challenge; hardwired into them is their incubation period, unique for each one but always too long for our liking; smallpox, 7 to 19 days; anthrax, up to 60 days; Ebola virus, 2 to 21 days. What does it mean, in a mobile, global society, if we recognize the first case of smallpox 7 days after exposure? And, there is the matter that for most of these agents, the symptoms are innocent and nondescript. No amount of money or planning or good intention can lower the hurdles the germs themselves impose. Our very best response can't approximate prevention.

I was born and raised on the Indian subcontinent. I have lived through the outbreaks of smallpox, malaria, typhoid, Hepatitis A, and many other diseases. When the risk is high, we must re-evaluate our position about making vaccines available to the public. Mr. Chairman, I suggest that a national committee of experts from the medical, scientific and intelligence communities be formed to review the level of threat, as well as the risks and

benefits of making smallpox and anthrax vaccines available to the population at large. Assessing the risk at this stage will help us protect our people from the most common agents that could be used against us by a terrorist.

On behalf of the members of the American Public Health Association, I thank you for this opportunity to discuss this matter of critical national security, and I am happy to answer any questions you may have.